METHODS, SOFTWARE AND APPARATI FOR IDENTIFYING GENOMIC REGIONS HARBORING A GENE ASSOCIATED WITH A DETECTABLE TRAIT

5   Abstract of the Disclosure

The present invention relates to methods, software, and apparati for determining whether a genomic region harbors a gene associated with a detectable trait. In one embodiment, the present invention relates to a method of confirming that a genomic region harbors a gene associated with a detectable trait comprising the steps of identifying a candidate genomic region 10 associated with a detectable trait comprising the steps of identifying a candidate genomic region suspected of harboring the gene associated with the detectable trait, constructing a trait-associated distribution of association values using the biallelic markers in the candidate genomic region, identifying a plurality of biallelic markers in random genomic regions which are not suspected of harboring the gene associated with the detectable trait, constructing a 15 random distribution of association values using the biallelic markers in the random genomic regions, comparing the trait-associated distribution of association values to the random distribution of association values, and determining whether the trait-associated distribution of association values and the random distribution of association values are significantly different from one another. In other embodiments, the present invention comprises software for 20 performing the above method and devices comprising the software in a retrievable form.

25

S:\DOCS\DOH\DOH-3600.DOC
110999